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LETTER REGARDING RESPONSE TO PUBLIC COMMENT ON THE SAFETY OF EATING
FISH FROM PORCUPINE LAKE NSB KINGS BAY GA
10/21/1992
ABB ENVIRONMENTAL



21 October 1992

Commanding Officer
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
P.O. Box 10068
Charleston, South Carolina 29411-0068

ATTN: Mr. Ed Lohr

SUBJECT: Response to Public Question
15 October 1992 Meeting
Naval Submarine Base, Kings Bay, GA
Contract Task Order No. 041
Prime Contract N62467-89-D-0317

Dear Mr. Lohr:

Attached is the response to the question the public presented during the 10 October 1992 meeting. The question was "are the fish in Porcupine Lake safe to eat?"

Since our current investigation is centered around volatile organic compounds, vinyl chloride in particular, we can answer the question with regards to VOC/vinyl chloride bioaccumulation. As we state in the attached memo, vinyl chloride does not bioaccumulate in fish tissue and would not be an exposure route.

However, we do not know what other contaminants may be present in the lake, either from the landfill or from possible dumping in the lake. Therefore, we cannot state the fish are "safe".

A copy of the response should be mailed by the Activity to the residents of Crooked River Piantation Subdivision. Please call me if there are any questions.

Sincerely,

ABB ENVIRONMENTAL SERVICES, INC.

A handwritten signature in black ink, appearing to read 'Frank Cater', is written over the typed name.

Frank Cater, P.E.
Task Order Manager

Enclosure: As Stated

cc: Mr. Jim More

ABB Environmental Services Inc.

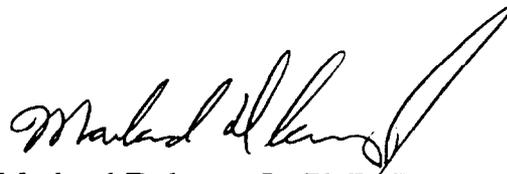
October 19, 1992

To: Frank Cater

Subject: Bioaccumulation Potential of Vinyl Chloride in Fish

I have reviewed the available literature on the bioaccumulation potential of vinyl chloride in both animals and plants. In laboratory studies it has been possible to detect vinyl chloride in the tissue of fish exposed to the chemical in the water (Lu et al. 1977). However, there is no evidence that vinyl chloride accumulates to any significant extent in either plant or animal tissue.

Therefore, fish consumption is not expected to be an important route of exposure for vinyl chloride and there is no evidence of a significant health threat from vinyl chloride exposure resulting from the consumption of the fish caught from Porcupine Lake. However, there is no evidence to support that the fish are "safe" to consume since there may be other chemicals (pesticides and fertilizers) in the fish tissue that may make it less suitable for consumption.



Marland Dulaney, Jr. Ph.D. DABT

References:

Lu, P.Y., R.L. Metcalf, and N. Plummer. 1977. The environmental fate of 3 carcinogens: Benzo(a)pyrene, benzidine and vinyl chloride evaluated in laboratory model ecosystem. Arch. Environ. Contam. Toxicol. 6:129-142.